0028055
OUTGOING LTR NO
87 RF 1755

DIST	LTR	ENCL
[illegible]CHINI D J	X	
BENJAMIN A		
ADAMS M L		
BADER C P		
CAMPBELL G W	X	
HOOD R C		
KINZER J E		
LANGHEIM G R	X	
McNETT J F		
PETERSON R G		
SHANNON W M		
SMITH R E		
VEJVODA E		
WEIDNER C W		
WESTON W F		
WILSON G L		
WOZNIAK B O		
YODER R E		
YOUNG E R		
Meyers, G W	X	
BETCHER D H		
CHANDA R N		
FREIBERG K J		
HARMAN L K		
HEBERT J L		
HOEY J B		
HOFFMAN R B		
KRIEG D M		
[illegible] W		
[illegible]JENBURG G E		
NAIMON E R		
NEWBY R L		
TURNER H L		
VELASQUEZ R N		
CORRES CONTROL	X	X
Daugherty, N M	X	
Henry, R L	X	
Potter, G L	X	
Setlock, G H	X	
EMP		
CLASSIFICATION		
UNCLASSIFIED		
CONFIDENTIAL		
SECRET		

AUTH CLASSIFIER SIG
[signature]
DATE 3-5-87
REPLY TO LTR NO
LTR APPROVALS
GWM - [illegible]
ORIG. & TYPIST INITIALS
NMD/d1b

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North American Space Operations
Rockwell International Corporation
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(303) 966-7000
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MAR 18 1987

87-RF-1755

Neal G. Berlin
City Manager
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ARVADA TAP WATER SAMPLE FOR DECEMBER 1986

In response to your letter of February 18, 1987, we have reviewed the water sampling data for the City of Arvada and have found no cause for concern regarding the plutonium concentrations. The Arvada plutonium concentration reported for December 1986 was within the range which we would expect to see as a result of the analytical uncertainties associated with measuring concentrations so close to zero.

The 95% confidence interval reported for the Arvada concentration of 0.05 pCi/l was $\pm$0.03 pCi/l. A verification analysis was performed on another aliquot of the Arvada sample which resulted in a measured concentration of -0.004 $\pm$ 0.017. (In this case the blank sample used to subtract out analytical background was higher than the Arvada sample, resulting in the negative value. This frequently occurs when analyzing for concentrations that are so low.) No trend toward increasing concentrations is indicated in the data. These water sample results may be compared to the Department of Energy Derived Concentration Guide (DCG) of 300 pCi/l. The DCGs are based on standards for protection of the public which have been recommended by the International Commission on Radiological Protection. Another comparison is the EPA Drinking Water Standard of 15 pCi/l for total alpha radiation, excluding uranium and radon. Plutonium is an alpha radiation emitter. Measured concentrations for the Arvada tap water samples are far below either of these standards.

Water sampling data for Great Western Reservoir and Standley Lake also have been reviewed. These are the only municipal water supplies which receive surface water discharge from the Rocky Flats Plant and

Descriptors
Arvada
Tap water
Sampling
plutonium

REVIEWED FOR CLASSIFICATION
By P.E. Bain
Date 6/20/90 (U)

ADMIN RECORD
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they are sampled weekly for a monthly composite analysis. Measured concentrations are within the expected ranges for these water supplies and exhibit no increasing trends in plutonium concentrations.

Air effluent concentrations and ambient air data were reviewed. No elevated measurements were found which could contribute to an increase in plutonium concentrations for any community water supply.

The Rocky Flats Plant environmental sampling program is continually reviewed to ensure that it is appropriate for demonstrating compliance with regulatory requirements and for providing assurance that adverse impacts of Plant activities on neighboring communities are minimized. We believe that the current schedule for reservoir and community tap water sampling provides that assurance. However, in an effort to allay any concerns of Arvada residents, I have directed my staff to increase the Arvada tap water sampling schedule for the next three months to a weekly sample collection with a monthly composite sample analysis.

In summary, the plutonium concentration seen in the December 1986 Arvada tap water sample is within the normal range of concentrations expected for these samples and well within any applicable standards for protection of the public. I hope that this information is helpful to you. Please contact us if you have further questions.

George W. Campbell, Director
Health, Safety and Environment

cc
A. E. Whiteman - DOE, RFAO